

This listing of claims will replace all prior versions of the claims in the application:

Listing of Claims:

1. (Currently amended) A topical nerve diagnostic system with the use of a computer, characterized by that ~~said topical nerve diagnostic system comprises~~ comprising:

a whole nerve pathway diagram data recording unit first data recording part for storing data of a whole nerve pathway diagram diagrams;

a nerve-finding data input unit first input part for receiving input data of normal-finding or abnormal-finding data input with respect to respective neural findings finding items;

a responsible nerve pathway data extraction unit first data extraction part for extracting data for drawing a responsible associated nerve pathways pathway relating to neural finding items being in related to an abnormal neural findings finding from the data stored in said whole nerve pathway diagram data recording unit based on the said first data recording part according to neural finding data received in inputted through said nerve-finding data input unit first input part;

a display unit display;

a whole nerve pathway indication unit part for displaying a whole nerve pathway diagram on said display unit display based on the data stored in said whole nerve pathway diagram data recording unit first data recording part;

a responsible an associated nerve pathway indication unit part for displaying a responsible drawing associated nerve pathway pathways in the whole nerve pathway diagram displayed on said display unit display by said whole nerve pathway indication unit based on the data extracted by said responsible nerve pathway data extraction unit first data extraction part;

and

a responsible an associated lesion estimation/indication unit for presuming estimation and indication part calculating a position of a responsible each of associated lesion lesions and

indicating the associated lesions in said the whole nerve pathway diagram based on the responsible associated nerve pathways pathway displayed drew on said display-unit display by said responsible associated nerve pathway indication unit part.

2. (Currently amended) The topical nerve diagnostic system according to claim 1, ~~characterized by that wherein~~ the data stored in said ~~whole nerve pathway diagram data recording unit~~ first data recording part contains data of at least names of nerve nuclei and positions of ~~respective nerve nuclei thereof~~ thereof in the whole nerve pathway diagram, data of connection relations in of the respective nerve nuclei, and data of curves ~~or and~~ straight lines representing nerve fascicles ~~for connecting which connect~~ the nerve nuclei with each other.

3. (Currently amended) The topical nerve diagnostic system according to claim 2, ~~characterized by that wherein~~ said ~~responsible nerve pathway data extraction unit~~ first data extraction part ~~is adapted to extract extracts from said first data recording part,~~ data of relevant names of associated nerve nuclei and positions of ~~nerve nuclei thereof~~ thereof in the whole nerve pathway diagram, relevant data of connection relations of ~~in the respective the associated~~ nerve nuclei, and data of curves ~~or and~~ straight lines representing nerve fascicles which connect ~~for connecting the relevant the associated~~ nerve nuclei with each other ~~from said whole nerve pathway diagram data recording unit in every neural finding items exhibiting abnormal findings when a neural finding is an abnormal neural finding.~~

4. (Currently amended) The topical nerve diagnostic system according to claim 3, ~~characterized by that wherein~~ said ~~responsible associated~~ lesion estimation/indication unit ~~is adapted to estimation and indication part detects~~ detects a region where ~~responsible associated~~ nerve pathways displayed on said display-unit display intersect with each other and a region where said ~~responsible associated~~ nerve pathways approach one another in the closest relation each other at closest distance, and ~~presume~~ presumes the detected regions ~~region detected~~ to be a

~~responsible associated lesions lesion thereby so as~~ to display the ~~responsible associated~~ lesion in said whole nerve pathway diagram on said ~~display-unit display~~.

5. (Currently amended) The topical nerve diagnostic system according to claim 4, ~~characterized by that said topical nerve diagnostic system further comprises comprising:~~

a nerve pathway cut surface data recording unit ~~second data recording part~~ for storing cut surface data in ~~of [[a]] specified regions region-in said of the~~ whole nerve pathway diagram;

a cut surface display-region-selection data input unit ~~second input part~~ for receiving selection ~~input data of selection as to input of a specified region-in which a cut surface of which region is to be displayed indicated~~ in the whole nerve pathway diagram displayed on said ~~display unit display~~;

a second responsible nerve pathway data extraction unit ~~data extraction part~~ for extracting data for drawing a responsible ~~associated~~ nerve ~~pathways pathway relating to a neural finding item to be in related to an abnormal neural findings finding onto in~~ a cut surface of a relevant specified region from the data stored in said nerve pathway cut surface data recording unit ~~second data recording part based on according to both the data received by inputted through said cut surface display-region-selection data input unit second input part and the data received by inputted through said nerve finding data input unit first input part~~;

a nerve pathway cut surface indication unit ~~part~~ for extracting relevant ~~associated~~ cut surface data from the data stored in said nerve pathway cut surface data recording unit ~~second data recording part based on according to the data received by said cut surface display-region selection data input unit inputted through said second input part thereby so as to display said relevant the associated~~ cut surface;

a second responsible ~~associated~~ nerve pathway indication unit ~~for displaying a responsible part drawing associated~~ nerve pathway ~~pathways~~ in the nerve pathway cut surface displayed by said nerve pathway cut surface indication unit ~~part~~ based on the data extracted by said second responsible nerve pathway data extraction unit ~~data extraction part~~; and

a second responsible associated lesion estimation/indication unit for ~~presuming~~
estimation and indication part calculating a position of a ~~responsible~~ each of associated lesions
region in said ~~relevant~~ the associated cut surface based on the responsible associated nerve
pathway pathways displayed on said display unit display by said second responsible associated
nerve pathway indication unit part thereby so as to display the responsible associated lesions
region presumed in said ~~relevant~~ the associated cut surface.

6. (Currently amended) The topical nerve diagnostic system according to claim 5,
~~characterized by that wherein~~ the data stored in said ~~nerve pathway cut surface data recording~~
unit second data recording part contains data of ~~relevant~~ respective names of nerve nuclei and
positions of ~~nerve nuclei thereof~~ in the cut surface, data of connection relations in relevant of
respective nerve nuclei, and data of curves or and straight lines representing nerve fascicles for
connecting which connect the relevant associated nerve nuclei with each other in ~~said~~ the every
cut surfaces.

7. (Currently amended) The topical nerve diagnostic system according to claim 6,
~~characterized by that wherein~~ said second ~~responsible nerve pathway data extraction unit~~ data
extraction part is adapted to ~~extract~~ extracts from said second data recording part, data of
~~relevant~~ respective names of associated nerve nuclei and positions of ~~nerve nuclei thereof~~ in the
cut surface, data of connection relations in relevant respective of the associated nerve nuclei, and
data of curves or and straight lines representing nerve fascicles for ~~connecting which connect~~
the relevant associated nerve nuclei with each other ~~from the relevant cut surface data stored in said~~
~~nerve pathway cut surface data recording unit second data recording part in every when a neural~~
~~finding items to be in~~ is an abnormal neural finding findings.

8. (Currently amended) The topical nerve diagnostic system according to claim 5,
~~characterized by that wherein~~ said second responsible associated lesion estimation/indication unit
is adapted to estimation and indication part detects detect a region where responsible associated

nerve pathways displayed on said ~~display unit~~ display intersect with each other and a region where said ~~responsible associated~~ nerve pathways approach ~~one another in the closest relation, each other at closest distance,~~ and ~~presume~~ presumes the ~~detected regions~~ region ~~detected~~ to be a ~~responsible associated lesions~~ region ~~thereby so as to display the responsible associated lesions~~ region ~~presumed~~ in said the cut surface.

9. (Currently amended) The topical nerve diagnostic system according to claim 5, ~~characterized by having further comprising~~ a screen page switchover ~~unit part~~ for switching over a screen page ~~of between~~ said a screen page of the whole nerve pathway diagram ~~in said display unit to and~~ a screen page of a cut surface ~~in of~~ a specified region of said the whole nerve pathway diagram.

10. (Currently amended) The topical nerve diagnostic system according to any one of claims 1 to 9, ~~characterized by that wherein~~ said neural findings ~~finding items~~ include oculomotor restriction, inferior oculomotor restriction, jaw reflex acceleration, impaired facial tactual sensation, impaired facial pain/temperature sensation, corneal areflexia, exterior oculomotor restriction no, upper facial paralysis, lower facial paralysis, impaired taste, lowered pharyngeal reflex/swallowing difficulty, impaired pharyngeal sound dysphemia, lingual muscle paralysis/impaired lingual sound dysphemia, sternocleidomastoid paralysis, impaired upper limb pain/temperature sensation, impaired upper limb deep sensation, upper limb motor paralysis, superior limb tendon reflex, impaired trunk pain/temperature sensation, impaired trunk deep sensation, level of impaired trunk deep sensation, impaired lower limb pain/temperature sensation, inferior bathyesthesia disorder, lower limb motor paralysis, inferior limb tendon reflex, and Babinski reflex.

11. (Currently amended) The topical nerve diagnostic system according to claim 1, ~~characterized by that wherein~~ the data stored in said ~~whole nerve pathway diagram data recording unit~~ first data recording part contains at least data of names of spinal roots, muscles

~~and skin areas~~ and positions of ~~respective spinal roots, respective muscles and respective skin areas thereof~~ in the whole nerve pathway diagram, ~~data of~~ connection relations ~~in of~~ the ~~respective spinal roots and the respective muscles, and data of~~ curves ~~or and~~ straight lines representing nerve fascicles ~~for connecting which connect~~ the ~~respective~~ spinal roots with the ~~respective skin muscles~~ as well as data of connection relations ~~in of~~ the ~~respective~~ spinal roots and the ~~respective~~ skin areas, and curves ~~or and~~ straight lines ~~for connecting which connect~~ the ~~respective~~ spinal roots with the ~~respective~~ skin areas.

12. (Currently amended) The topical nerve diagnostic system according to claim 11, ~~characterized by that wherein~~ said ~~responsible nerve pathway data extraction unit~~ first data extraction part ~~is adapted to extract~~ extracts from said first data recording part data of ~~relevant~~ names of associated spinal roots, associated muscle and associated skin areas and positions of ~~spinal roots, muscles and skin areas thereof~~ in the whole nerve pathway diagram, ~~relevant data of~~ connection relations ~~in of~~ the ~~respective~~ associated spinal roots and the ~~respective~~ associated muscles, and ~~data of~~ curves ~~or and~~ straight lines representing nerve fascicles ~~for connecting which connect~~ the ~~relevant~~ ~~respective~~ associated spinal roots with the ~~respective~~ associated skin areas ~~skins~~ as well as data of ~~relevant~~ connection relations ~~in of~~ the ~~respective~~ associated spinal roots and the ~~respective~~ associated skin areas, and ~~data of~~ curves ~~or and~~ straight lines ~~for connecting which connect~~ the ~~relevant~~ associated ~~respective~~ spinal roots with the ~~respective~~ associated skin areas from said whole nerve pathway diagram ~~data recording unit in every when~~ a neural finding items which are to be in is an abnormal neural finding findings.

13. (Currently amended) The topical nerve diagnostic system according to claim 12, ~~characterized by that wherein~~ said ~~responsible~~ associated lesion estimation/indication unit ~~is adapted to~~ estimation and indication part ~~detects~~ detect a region where ~~responsible~~ associated nerve pathways displayed on said display-unit display overlap with each other at the highest degree, and presume the ~~detected~~ region ~~detected~~ to be a ~~responsible~~ an associated lesion ~~thereby~~

so as to display the responsible associated lesion ~~presumed~~ in said the whole nerve pathway diagram on said ~~display-unit display~~.

14. (Currently amended) The topical nerve diagnostic system according to claim 13, ~~characterized by having~~ further comprising a third responsible associated lesion estimation/indication unit excluding a responsible estimation and indication part removing an associated nerve pathway part corresponding to nerve fascicles ~~for connecting which connect~~ a muscle or a skin region area in which which is related to data of finding data input comes to be a normal findings finding with the associated spinal roots ~~relating thereto~~ from the responsible associated nerve pathways ~~displayed drew~~ in said the whole nerve pathway diagram on the ~~display-unit display by means of said responsible associated lesion estimation/indication unit estimation and indication part~~ in the case when data of an abnormal neural finding of the finding data input as to abnormality of respective the muscles or respective the skin regions areas which are related to relating to said responsible the associated nerve pathways is received by inputted through said nerve-finding data input-unit first input part.

15. (Currently amended) The topical nerve diagnostic system according to claim 14, ~~characterized by that wherein said the neural findings finding-items include findings with respect to muscle force muscle strength related to movement of joints and perception disorder in respective muscle and of skin areas regions relating to movements of respective articulations.~~

16. (Withdrawn) A neuroanatomy learning system with the use of a computer, characterized by that said neuroanatomy learning system comprises:

a nerve pathway cut surface data recording unit for recording cut surface data in at least one region of cerebrum and mesencephalon, at least one region of pons, at least one region of medulla oblongata, and at least one region of spinal cord, respectively, in a whole pathway diagram;

a display unit;

a nerve pathway cut surface indication unit for displaying cut surfaces of at least one region of the cerebrum and the mesencephalon, at least one region of the pons, at least one region of the medulla oblongata, at least one region of the medulla oblongata, and at least one region of the spinal cord, respectively, in this order based on the data stored in said nerve pathway cut surface data recording unit;

a nerve pathway selection data input unit for receiving selection data input of nerve pathways to be displayed on said display unit;

a nerve pathway data extraction unit for extracting data for drawing relevant nerve pathways from the data stored in said nerve pathway cut surface data recording unit based on the data received by the nerve pathway selection data input unit in every nerve pathway cut surfaces;

a nerve pathway indication unit for displaying relevant nerve pathways in a nerve pathway cut surface displayed by said nerve pathway cut surface indication unit based on the data extracted by said nerve pathway data extraction unit;

a nerve pathway cut surface selection data input unit for receiving selection data input for a nerve pathway cut surface which is intended to individually display among the nerve pathway cut surfaces displayed on said display unit by means of said nerve pathway cut surface indication unit;

an individual nerve pathway cut surface data extraction unit for extracting data for drawing a relevant nerve pathway cut surface from the data stored in said nerve pathway cut surface data recording unit based on the data received by said nerve pathway cut surface selection data input unit;

an individual nerve pathway cut surface indication unit for displaying a relevant nerve pathway cut surface on said display unit based on the data extracted by said individual nerve pathway cut surface data extraction unit; and

a nerve pathway-nerve nucleus name indication unit for displaying a name of a nerve pathway or a nerve nucleus which is selected in the nerve pathway cut surface displayed on said display unit by means of said individual nerve pathway cut surface indication unit.

17. (Withdrawn) The neuroanatomy learning system according to claim 16, characterized by that the data stored in said nerve pathway cut surface data recording unit contains data of relevant names and positions of nerve nuclei in said cut surfaces, relevant connection relations in the nerve nuclei, and curves or straight lines representing nerve fascicles for connecting relevant nerve nuclei with each other, and names of relevant nerve pathway and positions in said cut surfaces in every cut surfaces.

18. (Withdrawn) The neuroanatomy learning system according to claim 16 or 17, characterized by that at least one region of said mesencephalon consists of the upper part of the mesencephalon and the lower part of the mesencephalon, at least one region of said pons consists of the upper, the middle, and the lower parts of the pons, at least one region of the medulla oblongata consists of the upper part, the upper-middle part, the middle, the middle-lower part, and the lower part of the medulla oblongata, and at least one region of said spinal cord consists of a cervical segment, a thoracic segment, and a lumbar segment.